

# Bin He

## List of Publications by Year in descending order

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Version: 2024-02-01

64  
papers

1,510  
citations

331259

21  
h-index

344852

36  
g-index

67  
all docs

67  
docs citations

67  
times ranked

859  
citing authors

#	ARTICLE	IF	CITATIONS
1	Digital twin-based sustainable intelligent manufacturing: a review. <i>Advances in Manufacturing</i> , 2021, 9, 1-21.	3.2	296
2	Underactuated robotics: A review. <i>International Journal of Advanced Robotic Systems</i> , 2019, 16, 172988141986216.	1.3	100
3	Product sustainability assessment for product life cycle. <i>Journal of Cleaner Production</i> , 2019, 206, 238-250.	4.6	61
4	Product carbon footprint across sustainable supply chain. <i>Journal of Cleaner Production</i> , 2019, 241, 118320.	4.6	60
5	Product environmental footprints assessment for product life cycle. <i>Journal of Cleaner Production</i> , 2019, 233, 446-460.	4.6	54
6	Data fusion-based sustainable digital twin system of intelligent detection robotics. <i>Journal of Cleaner Production</i> , 2021, 280, 124181.	4.6	47
7	Low-carbon product design for product life cycle. <i>Journal of Engineering Design</i> , 2015, 26, 321-339.	1.1	46
8	Product carbon footprint for product life cycle under uncertainty. <i>Journal of Cleaner Production</i> , 2018, 187, 459-472.	4.6	43
9	Product Sustainable Design: A Review From the Environmental, Economic, and Social Aspects. <i>Journal of Computing and Information Science in Engineering</i> , 2020, 20, .	1.7	42
10	Automated Conceptual Design of Mechanisms Using Improved Morphological Matrix. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2006, 128, 516-526.	1.7	41
11	Digital Twin-Driven Remaining Useful Life Prediction for Gear Performance Degradation: A Review. <i>Journal of Computing and Information Science in Engineering</i> , 2021, 21, .	1.7	40
12	Towards low-carbon product architecture using structural optimization for lightweight. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 83, 1419-1429.	1.5	36
13	Product design evaluation for product environmental footprint. <i>Journal of Cleaner Production</i> , 2018, 172, 3066-3080.	4.6	36
14	Low-carbon conceptual design based on product life cycle assessment. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 81, 863-874.	1.5	31
15	Product low-carbon design using dynamic programming algorithm. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2015, 2, 37-42.	2.7	29
16	Sustainable design synthesis for product environmental footprints. <i>Design Studies</i> , 2016, 45, 159-186.	1.9	28
17	Feature-based integrated product model for low-carbon conceptual design. <i>Journal of Engineering Design</i> , 2017, 28, 408-432.	1.1	28
18	Sustainable design from functional domain to physical domain. <i>Journal of Cleaner Production</i> , 2018, 197, 1296-1306.	4.6	28

#	ARTICLE	IF	CITATIONS
19	Virtual prototyping-based multibody systems dynamics analysis of offshore crane. International Journal of Advanced Manufacturing Technology, 2014, 75, 161-180.	1.5	27
20	A feature-based approach towards an integrated product model in intelligent design. International Journal of Advanced Manufacturing Technology, 2013, 69, 15-30.	1.5	25
21	Cost-constrained low-carbon product design. International Journal of Advanced Manufacturing Technology, 2015, 79, 1821-1828.	1.5	23
22	Workspace analysis of a novel underactuated robot wrist based on virtual prototyping. International Journal of Advanced Manufacturing Technology, 2014, 72, 531-541.	1.5	22
23	Kinematics analysis and numerical simulation of a manipulator based on virtual prototyping. International Journal of Advanced Manufacturing Technology, 2014, 71, 943-963.	1.5	21
24	Guiding conceptual design through functional space exploration. International Journal of Advanced Manufacturing Technology, 2013, 66, 1999-2011.	1.5	19
25	Kinematics of underactuated robotics for product carbon footprint. Journal of Cleaner Production, 2020, 257, 120491.	4.6	19
26	Computational Conceptual Design Using Space Matrix. Journal of Computing and Information Science in Engineering, 2015, 15, .	1.7	17
27	Accuracy analysis of a spherical 3-DOF parallel underactuated robot wrist. International Journal of Advanced Manufacturing Technology, 2015, 79, 395-404.	1.5	17
28	Type synthesis of non-holonomic spherical constraint underactuated parallel robotics. Acta Astronautica, 2018, 152, 509-520.	1.7	17
29	Automated synthesis of mechanisms with consideration of mechanical efficiency. Journal of Engineering Design, 2014, 25, 213-237.	1.1	16
30	Application of unascertained number for the integration of carbon footprint in conceptual design. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 2088-2092.	1.5	16
31	Virtual prototyping-based fatigue analysis and simulation of crankshaft. International Journal of Advanced Manufacturing Technology, 2017, 88, 2631-2650.	1.5	16
32	Product sustainable design for carbon footprint during product life cycle. Journal of Engineering Design, 2021, 32, 478-495.	1.1	14
33	Product model integrated with carbon footprint for low-carbon design. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2383-2388.	1.1	13
34	Working Space Analysis and Simulation of Modular Service Robot Arm Based on Monte Carlo Method. Applied Mechanics and Materials, 0, 34-35, 1104-1108.	0.2	12
35	Research on collaborative conceptual design based on distributed knowledge resource. International Journal of Advanced Manufacturing Technology, 2013, 66, 645-662.	1.5	12
36	Simultaneous functional synthesis of mechanisms with mechanical efficiency and cost. International Journal of Advanced Manufacturing Technology, 2014, 75, 659-665.	1.5	12

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37	Dynamics analysis and numerical simulation of a novel underactuated robot wrist. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 2145-2158.	1.5	12
38	Skeleton model-based product low carbon design optimization. Journal of Cleaner Production, 2020, 264, 121687.	4.6	12
39	Digital Twin-Driven Controller Tuning Method for Dynamics. Journal of Computing and Information Science in Engineering, 2021, 21, .	1.7	12
40	Boundary Encryption-Based Monte Carlo Learning Method for Workspace Modeling. Journal of Computing and Information Science in Engineering, 2020, 20, .	1.7	12
41	Functional synthesis of mechanisms under cost consideration. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 91-99.	1.5	10
42	Rigid-flexible coupling virtual prototyping-based approach to the failure mode, effects, and criticality analysis. International Journal of Advanced Manufacturing Technology, 2019, 100, 1695-1717.	1.5	10
43	Design resource management for virtual prototyping in product collaborative design. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 2284-2300.	1.5	8
44	Skeleton model-based approach to integrated engineering design and analysis. International Journal of Advanced Manufacturing Technology, 2016, 85, 1105-1115.	1.5	8
45	Product Multibody Dynamics Analysis for Low-Carbon Footprint. Journal of Computing and Information Science in Engineering, 2023, 23, .	1.7	8
46	Lifting Platform in Jack-Up Offshore Platform Based on Virtual Prototyping. Applied Mechanics and Materials, 0, 198-199, 154-157.	0.2	7
47	Kinematics analysis and numerical simulation of a novel underactuated robot wrist. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 1429-1448.	1.5	6
48	An approach to computational co-evolutionary product design. International Journal of Advanced Manufacturing Technology, 2017, 90, 249-265.	1.5	6
49	Functional Space Expansion Process for Product Innovation. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2009, 45, 189.	0.7	6
50	Ultraviolet Laser-Induced Fluorescence Spectroscopy Diagnosis of Human Stomach Malignant Tissues. Lasers in Medical Science, 1998, 13, 209-213.	1.0	5
51	Integrating engineering design and analysis using a parameter constraint graph approach. Simulation, 2015, 91, 625-647.	1.1	5
52	Synthesis of mechanisms integrated with motion and force transformation. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1643-1649.	1.1	5
53	Virtual Prototyping-based Integrated Information Modeling and Its Application in the Jacking System of Offshore Platform. International Journal of Hybrid Information Technology, 2013, 6, 135-148.	0.6	4
54	Numerical simulation of gear surface hardening using the finite element method. International Journal of Advanced Manufacturing Technology, 2014, 74, 665-672.	1.5	3

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55	A Convolutional Neural Network-Based Recognition Method of Gear Performance Degradation Mode. Journal of Computing and Information Science in Engineering, 2022, 22, .	1.7	2
56	Design of Signal Feature Extraction Solution for Gear Performance Degradation. Mechanisms and Machine Science, 2022, , 2047-2068.	0.3	2
57	Automated Sustainable Low-Carbon Design of Offshore Platform for Product Life Cycle. Mechanisms and Machine Science, 2020, , 847-863.	0.3	1
58	Kinematics approach to energy efficiency for non-holonomic underactuated robotics in sustainable manufacturing. International Journal of Advanced Manufacturing Technology, 0, , 1.	1.5	1
59	Collision dynamics of gear meshing with multi-clearance and multi-state under friction consideration. International Journal of Advanced Manufacturing Technology, 2022, 120, 5073-5091.	1.5	1
60	Cloud Service-Based Collaborative Design Resource Management. Mechanisms and Machine Science, 2018, , 539-552.	0.3	0
61	Intelligent manufacturing and robotics in offshore engineering. Aeronautics and Aerospace Open Access Journal, 2018, 2, .	0.1	0
62	Underactuated robotics in aerospace and agricultural engineering. Aeronautics and Aerospace Open Access Journal, 2018, 2, .	0.1	0
63	A Meta-Model for Intelligent Engineering Design of Complex City. , 2019, , 235-263.		0
64	Deep Belief Network-based Prediction for Gear Noise. , 2022, , .		0